MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
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DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

NOTICE OF ACCEPTANCE (NOA)

SABIC Innovative Plastics
One plastics Avenue
Pittsfield, MA 01201

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER-Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: Lexan® Polycarbonate Sheet Products

APPROVAL DOCUMENT: Drawing No.**13-SIP-01**, titled "Lexan® Sheet Products", Sheets 1 and 2 of 2, dated 10/18/2013, prepared by Engineering Express, signed and sealed by Frank L. Bennardo, P.E., bearing the Miami-Dade County Product Control revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: None.

LIMITATION: This approval does not include an evaluation of structural performance of this component. Test reports and other required documents shall be submitted to Dade County Product Control; showing that the systems using this polycarbonate sheets will resist the loads according to Chapter 16 of the F.B.C., in order to issue an specific product approval for the system.

LABELING: Plastic sheets under this product approval shall be permanently marked in a corner of the sheet with the company's name or logo, "MDCA" standing for "Miami-Dade County Approved" and the location of the manufacturing plant in Mt. Vernon, IN or Long Sault, Ontario, Canada. The fabricator producing the polycarbonate sheets shall apply this mark.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA **renews** and **revises NOA # 08-0305.02** and consists of this page, evidence page E-1, as well as approval document mentioned above.

The submitted documentation was reviewed by **Carlos M. Utrera, P.E.**

MIAMI-DADE COUNTY APPROVED

11/20/2013

NOA No: 13-0717.01
Expiration Date: July 17, 2018
Approval Date: November 28, 2013

NOTICE OF ACCEPTANCE: EVIDENCE PAGE

A. DRAWING

1. Drawing No. **13-SIP-01**, titled "Lexan® Sheet Products", Sheets 1 and 2 of 2, dated 10/18/2013, prepared by Engineering Express, signed and sealed by Frank L. Bennardo, P.E.

B. TEST REPORTS *"Evidence Submitted under NOA # 07-0212.01"*

	Laboratory Report	Test	Date	Signature
1.	SGS 548643-01	ASTM D 635	03/01/06	J. Lomash
2.	SGS 548643-02	ASTM D 2843	03/01/06	J. Lomash
3.	SGS 548643-03	ASTM D 1929	03/01/06	J. Lomash
4.	SGS 494881-04	ASTM D 635	01/06/06	J. Lomash
5.	SGS 494881-05	ASTM D 635	01/06/06	J. Lomash
6.	SGS 548643-06	ASTM D 635	03/10/06	J. Lomash
7.	SGS 548643-07	ASTM D 1929	03/10/06	J. Lomash
8.	SGS 494881-07	ASTM D 2843	01/10/06	J. Lomash
9.	SGS 548643-09	ASTM D 2843	03/10/06	J. Lomash
10.	SGS 548643-10	ASTM D 1929	03/10/06	J. Lomash
11.	SGS 548643-11	ASTM D 2843	03/10/06	J. Lomash
12.	SGS 548643-12	ASTM D 2843	03/10/06	J. Lomash
13.	SGS 548643-13	ASTM D 635	03/10/06	J. Lomash
14.	SGS 548643-14	ASTM D 2843	03/10/06	J. Lomash
15.	ETL 3073590	ASTM D638, G26 & G155	11/04/05	C. Lawson

C. CALCULATIONS

1. None.

D. QUALITY ASSURANCE

1. Miami-Dade Department of Regulatory and Economic Resources (RER)

E. MATERIAL CERTIFICATIONS

1. None.

F. STATEMENTS

1. Drawing No. **13-SIP-01** statement of code conformance to 2010 FBC issued by Engineering Express, dated 10/18/2013, signed and sealed by Frank L. Bennardo, P.E.
2. Statement letter of no financial interest issued by Engineering Express, dated 09/09/2013, signed and sealed by Frank L. Bennardo, P.E.

11/20/2013

Carlos M. Utrera, P.E.
Product Control Examiner
NOA No 13-0717.01
Expiration Date: July 17, 2018
Approval Date: November 28, 2013

LEXAN® SHEET PRODUCTS

TABLE 1: LEXAN® 9030, XL-10, MR10 BURNING CHARACTERISTICS

DESCRIPTION	TESTING STANDARD	PROPERTIES					
		LEXAN® 9030			XL-10	MR10	
		0.030 IN (MIN)	0.060 IN (MIN)	0.080 IN (MIN)	0.125 IN (MIN)	0.125 IN (MIN)	0.500 IN (MIN)
SELF-IGNITION	ASTM D-1929	980° F	980° F	980° F	980° F	980° F	980° F
FLASH-IGNITION	ASTM D-1929	780° F	780° F	780° F	780° F	780° F	780° F
AVERAGE BURNING TIME	ASTM D-635	95 sec	250 sec	40 sec	45 sec	25 sec	50 sec
AVERAGE EXTENT OF BURNING	ASTM D-635	45.0 mm		20.0 mm	10.0 mm	10.0 mm	20.0 mm
BURNING RATE	ASTM D-635	23.33 mm/min	18.10 mm/min				
BURNING RATE CLASS	ASTM D-635	CC2	CC2	CC1	CC1	CC1	CC1

TABLE 2: LEXAN® 9034, XL-10, MR10 SMOKE DENSITY

DESCRIPTION	TESTING STANDARD	PROPERTIES					
		LEXAN® 9034		XL-10		MR10	
		0.125 IN	0.225 IN	0.093 IN	0.500 IN	0.125 IN	0.500 IN
SMOKE DENSITY	ASTM D-2843	64.50%	69.10%	73.20%	68.70%	67.00%	69.80%
	ASTM E-84						

TABLE 3: XL102UV, XL10SP, XLDSCIR BURNING CHARACTERISTICS

DESCRIPTION	TESTING STANDARD	XL102UV					XL10SP	XLDSCIR			
		0.080 IN (MIN)	0.093IN (MIN)	0.118 IN (MIN)	0.177 IN (MIN)	0.236 IN (MIN)	2mm (MIN)	COLOR: GN9A047T		COLOR: GN8A081T	
								0.118 IN (MIN)	0.177 IN (MIN)	0.118 IN (MIN)	0.177 IN (MIN)
SELF-IGNITION	ASTM D-1929	1182° F* (3 grams)	1182° F* (3 grams)	1182° F* (3 grams)	1182° F* (3 grams)	1182° F* (3 grams)	1212° F*	982° F*	982° F*	1012° F*	1012° F*
FLASH-IGNITION	ASTM D-1929	962° F* (3 grams)	962° F* (3 grams)	962° F* (3 grams)	962° F* (3 grams)	962° F* (3 grams)	972° F	992° F*	992° F*	1032° F*	1032° F*
AVERAGE BURNING TIME	ASTM D-635***						53 sec				
AVERAGE EXTENT OF BURNING	ASTM D-635***						12.5 mm				
BURNING RATE	ASTM D-635***										
BURNING RATE CLASS	ASTM D-635***	CC1	CC1	CC1	CC1	CC1	CC1	CC1	CC1	CC1	CC1
SMOKE DENSITY	ASTM D-2843	0.25 IN	0.25 IN	0.25 IN	0.25 IN	0.25 IN	0.25 IN	0.118 IN	0.177 IN	0.118 IN	0.177 IN
		60.5%**	60.5%**	60.5%**	60.5%**	60.5%**	52.8%	57.1%	55.0%	49.3%	49.2%

TABLE 3 NOTES:
*ASTM D-1929 TEST IS BASED ON FORM OF MATERIAL AND MASS. THEREFORE, ONLY ONE TEST IS REQUIRED FOR GROUP OF SIMILAR PRODUCTS.
**ASTM D-2843 TEST IS APPROXIMATELY 1"x1"x¼" THICKNESS. THEREFORE, ONE TEST QUALIFIES ALL THICKNESSES OF A GROUP OF SIMILAR PRODUCTS.
***ASTM D-635 ALL GAUGES BETWEEN MINIMUM & MAXIMUM THICKNESSES WILL BE APPROVED FOR THE SAME BURNING RATE CLASS OF THE THINNER PRODUCT.

INDICATES VALUES THAT ARE NOT REPORTED ON THIS CERTIFICATION

GENERAL NOTES:

1. THIS LEXAN® POLYCARBONATE MATERIAL COMPLIES WITH THE 2010 FLORIDA BUILDING CODE AND IS INTENDED FOR USE WITHIN AND OUTSIDE OF THE HIGH VELOCITY HURRICANE ZONE.
2. THIS DOCUMENT IS INTENDED FOR MATERIAL COMPLIANCE CERTIFICATION. ANY SPECIFIC USE OF THE MATERIALS, SPECIFIED WITHIN THIS DOCUMENT, AS A BUILDING COMPONENT SHALL REQUIRE A SPECIFIC APPROVAL DESIGNATING THE APPLICABLE USE.
3. THIS DOCUMENT IS INTENDED FOR USE BY A LICENSED ENGINEER, ARCHITECT OR DESIGN PROFESSIONAL OF WHOM SHALL DETERMINE THE APPROPRIATE APPLICATION.
4. ACCELERATED WEATHERING TESTING CONDUCTED PER ASTM G-26 ON LEXAN® 9034 AND LEXAN® THERMOCLEAR WITH STANDARD LIGHT TRANSMISSION INDEXES.
5. LEXAN® 9034 REPRESENT THE UNCOATED POLYCARBONATE SHEET AS IS APPROVED FOR USE IN EXTERIOR APPLICATIONS WITHOUT THE UV PROTECTIVE COATING.
   5.1. LEXAN® 9034 SHEETS SHALL QUALIFY THE FOLLOWING:
      5.1.1. LEXAN® 9030, BOTH SURFACES ARE SMOOTH
      5.1.2. LEXAN® 90318, PEBBLE FLINT-SHOT TEXTURE
      5.1.3. LEXAN® 90316, PRISMATIC SURFACE
      5.1.4. LEXAN® 90317, PRISMATIC SURFACE
      5.1.5. LEXAN® 90311, HAIRCELL/COB GLAZING SURFACE TEXTURE
      5.1.6. LEXAN® 90314 HIGH GLOSS MATTE SURFACE TEXTURE
      5.1.7. LEXAN® 90355 VELVET/F-SHOT LOW GLOSS SURFACE TEXTURE
6. MR10 SHEETS UTILIZE LEXAN® AS A BASE PRODUCT AND ARE APPROVED FOR EXTERIOR USE.
7. XL-10, XL10SP AND XL102UV SHEETS UTILIZE LEXAN® 9034 AS A BASE PRODUCT AND ARE APPROVED FOR EXTERIOR USE.
   7.1. LEXAN® XL-10 SHEET SHALL QUALIFY THE FOLLOWING:
      7.1.1. LEXAN® SGC100, SMOOTH SURFACES
      7.1.2. LEXAN® SG308, MATTE SURFACE TEXTURE
      7.1.3. LEXAN® SG404, MISCELLANEOUS COLORS
      7.1.4. LEXAN® SG410
8. LEXAN® THERMOCLEAR SHEETS ARE MULTI-WALL POLYCARBONATE PLASTIC SHEETS OF LEXAN® RESIN MANUFACTURED BY SABIC INNOVATIVE PLASTICS.
9. FOR EXTERNAL APPLICATIONS, MINIMUM THICKNESS SHALL BE 0.033 IN FOR SHEETS AND 6mm FOR MULTI-WALLED APPLICATIONS.
10. XLDSCIR SHEETS ARE APPROVED FOR INTERIOR USE ONLY.
11. ENGINEER SEAL AFFIXED HERE TO VALIDATES MATERIAL COMPLIANCE ONLY. USE OF THIS SPECIFICATION BY MANUFACTURERS, et. al. INDEMNIFIES & SAVES HARMLESS THIS ENGINEER FOR ALL COST & DAMAGES INCLUDING LEGAL FEES & APPELLATE FEES RESULTING FROM MATERIAL FABRICATION, SYSTEM ERECTION, & CONSTRUCTION PRACTICES BEYOND THAT WHICH IS CALLED FOR BY LOCAL, STATE, & FEDERAL CODES & FROM DEVIATIONS OF THIS PLAN.
12. EXCEPT AS EXPRESSLY PROVIDED HEREIN, NO ADDITIONAL CERTIFICATIONS OR AFFIRMATIONS ARE INTENDED.
13. ALTERATIONS OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE THIS CERTIFICATION.

PRODUCT REVISED
as complying with the Florida Building Code
Acceptance No 13-0717.01
Expiration Date 07/17/2018
By
Miami-Dade Product Control

FRANK L. BENNARDO # PE0046549 LICENSE No. 46549 STATE OF FLORIDA PROFESSIONAL ENGINEER 10/18/2013

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A FRANK L. BENNARDO, P.E., INC. INNOVATION

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LEXAN® SHEET PRODUCTS
MATERIAL PROPERTIES

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	CSL	TSB	08/08/13

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TABLE 4: LEXAN®9034, LEXAN® THERMOCLEAR TENSILE PROPERTIES

DESCRIPTION	TESTING STANDARD	LEXAN® 9034		LEXAN® THERMOCLEAR
		0.033 IN		6 mm
		MD	CD	
TENSILE STRENGTH BEFORE WEATHERING	ASTM D-638	8940 PSI	8730 PSI	9326 PSI
TENSILE STRENGTH AFTER WEATHERING	ASTM D-638	8880 PSI	8920 PSI	8618 PSI
PERCENT DIFFERENCE	ASTM D-635	-0.7%	2.1%	-7.6%

TABLE 5: LEXAN® THERMOCLEAR BURNING CHARACTERISTICS

DESCRIPTION	TESTING STANDARD	PROPERTIES															
		LEXAN® THERMOCLEAR															
		LTC2R45		LTC 2R6		LTC 2R8		LTC 2R10		LTC 3T16		LTC 20/5RS3300		LTC 25/6RS3500		LTC 32/5X3	
		4.5 mm		6 mm		8 mm		10 mm		16 mm		20 mm		25 mm		32 mm	
SELF-IGNITION	ASTM D-1929	1110° F		1110° F		1110° F		1110° F		1110° F		1110° F		1110° F		1110° F	
FLASH-IGNITION	ASTM D-1929	940° F		940° F		940° F		940° F		940° F		940° F		940° F		940° F	
		ACROSS RIB	ALONG RIB	ACROSS RIB	ALONG RIB	ACROSS RIB	ALONG RIB	ACROSS RIB	ALONG RIB	ACROSS RIB	ALONG RIB	ACROSS RIB	ALONG RIB	ACROSS RIB	ALONG RIB		
AVERAGE BURNING TIME	ASTM D-635	10 sec	60 sec	< 5 sec	< 5 sec	< 5 sec	< 5 sec	< 5 sec	< 5 sec	< 5 sec	< 15 sec	85 sec	95 sec	110 sec	125 sec	60 sec	
AVERAGE EXTENT OF BURNING	ASTM D-635	5 mm	35 mm	< 5 mm	< 5 mm	< 5 mm	< 5 mm	< 5 mm	< 5 mm	< 5 mm	< 5 mm			45 mm	55 mm	10 mm	
BURNING RATE	ASTM D-635											53.8 mm/min	47.9 mm/min	39.4 mm/min			
BURNING RATE CLASS	ASTM D-635	CC1	CC2	CC1	CC1	CC1	CC1	CC1	CC1	CC1	CC1	CC2	CC2	CC2	CC2		
SMOKE DENSITY	ASTM D-2843											73.60%					
SMOKE DENSITY	ASTM E-84	35		70		70		100		<450				275		<450	
FLAME SPREAD	ASTM E-84	5		5		5		5		55				120		90	

INDICATES VALUES THAT ARE NOT REPORTED ON THIS CERTIFICATION

PRODUCT REVISED
as complying with the Florida Building Code
Acceptance No 13-0717.01
Expiration Date 07/12/2018
By
Miami Dade Product Control

A. FRANK L. BENNARDO, P.E.
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10/18/2013
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LEXAN® SHEET PRODUCTS
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